

What is claimed is:

1 1. A CMP machine dresser, comprising:
2 a substrate;
3 a first conductive layer and a second conductive layer
4 respectively disposed and isolated in the substrate;
5 a plurality of diamonds mounted in the first conductive
6 layer and the second conductive layer; and
7 a bonding layer disposed on the substrate for attaching
8 the diamonds;
9 wherein, the first conductive layer and the second
10 conductive layer detect the conductive materials penetrating
11 into the original position of the diamonds when any of the
12 diamonds dislodges, so as to determine whether any of the
13 diamonds dislodges.

1 2. The dresser as recited in claim 1, further comprising
2 a detecting circuit, connected to the first conductive layer
3 and the second conductive layer, and feeding back to the
4 chemical mechanical polishing machine when the short circuit
5 of the first conductive layer to the second conductive layer
6 occurs.

1 3. The dresser as recited in claim 1, wherein the
2 conductive layer comprises metals or alloys.

1 4. The dresser as recited in claim 1, wherein the
2 conductive materials comprise a polishing slurry.

1 5. The dresser as recited in claim 1, wherein the
2 conductive materials comprise water.

1 6. The dresser as recited in claim 1, wherein the
2 detecting circuit comprises a low voltage and current circuit.

1 7. A method for detecting diamonds dislodging from the

CMP machine dresser comprising the steps of:

providing a substrate, in which a first conductive layer and a second conductive layer are respectively disposed and isolated, and mounting a plurality of diamonds in the first conductive layer and the second conductive layer, and disposing a bonding layer for attaching the diamonds to the substrate; and

detecting whether or not the short circuit of the first conductive layer to the second conductive layer occurs, so as to determine whether any of the diamonds dislodges;

wherein, the short circuit of the first conductive layer to the second conductive layer occurs when any of the diamonds dislodges and conductive materials penetrate the original position of the diamonds.

8. The method as recited in claim 7, further comprising a step of using a detecting circuit connected to the first conductive layer and the second conductive layer, then feeding back to the chemical mechanical polishing machine when the short circuit of the first conductive layer to the second conductive layer occurs.

9. The dresser as recited in claim 7, wherein the conductive layer comprises metals or alloys.

10. The method as recited in claim 7, wherein the conductive materials comprise a polishing slurry.

11. The method as recited in claim 7, wherein the conductive materials comprise water.

12. The method as recited in claim 7, wherein the detecting circuit comprises a low voltage and current circuit.